

Appendix A



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,539	10/24/2003	Dany Sylvain	7000-271A	2302
27820 7590 12/11/2008 WITHROW & TERRANOVA, P.L.L.C. 100 REGENCY FOREST DRIVE SUITE 160 CARY, NC 27518			EXAMINER KIM, WESLEY LEO	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 12/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DOCKETED

Office Action Summary	Application No.	Applicant(s)	
	10/693,539	SYLVAIN, DANY	
	Examiner	Art Unit	
	WESLEY L. KIM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-23 and 25-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-23 and 25-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/19/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/19/08 has been entered.

Response to Amendment

2. This Office Action is in response to Amendment filed on 9/19/08.
 - Claims 1-2 and 22-23 are currently amended.
 - Claims 3 and 24 are cancelled.
 - Claims 41-42 are newly added.
 - Claims 1-2, 4-23, and 25-42 are pending in the current Office Action

Response to Arguments

3. Applicant's arguments with respect to claims 1-2, 4-23, and 25-42 have been considered but are moot in view of the new ground(s) of rejection.

Specification

4. The disclosure is objected to because of the following informalities: Paragraph 2 of the Specification includes a blank for the US patent application serial number. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8, 11-16, 18-19, 21-23, 25-26, 29-34, 36-37, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al (US 2003/0134650 A1) in view of Malmstrom (US 5901359).

Regarding Claims 1, 11, 22, and 29, Sundar teaches a) a wireline network interface (Fig.3:112 and Fig.3:120); b) a local wireless interface providing a communication zone in which communications with a mobile terminal are possible (Fig.5:Access Point 204), the mobile terminal associated with a primary directory number associated with a wireline network (Par.21-23 and Par.96, obviously there is a primary directory number so that the mobile station can be contacted while in the LAN which is a wireline network) and adapted to communicate with the local wireless interface to facilitate a call through the wireline network (Fig.5: LAN) and communicate with a wireless network to facilitate a call through the wireless network (Par.96, mobile station can roam and communicate with WWAN); and c) a control system cooperating with the wireline network interface and the local wireless interface (Fig.5: MSC 302) and adapted to: i) use the primary directory number associated with the wireline network to establish through the wireline network a first call involving the mobile terminal by communicating with the wireline network via the wireline network interface (Par.21-23 and Par.96,

obviously there is a primary directory number so that the mobile station can be contacted while in the LAN which is a wireline network) and communicating with the mobile terminal via the local wireless interface (Fig.5: Access Point 204 is used so the mobile terminal communicates with the local wireless interface); ii) during the first call (Par.23), detect the mobile terminal moving out of the local wireless communication zone (Par.96:lines 9-16); and iii) initiate a transition of the first call being connected to the mobile terminal through the wireline network via the local wireless interface (Par.96: handover is initiated) to the first call being connected to the mobile terminal through the wireless network using a temporary directory number provided by a wireless switch currently providing wireless access for the mobile terminal (Par.21-23, temporary directory number is provided by wireless switch (i.e. MSC of WWAN)), however **Sundar does not expressly teach** a primary directory number associated with the wireline network.

Malmstrom teaches that it is well known in the art that a primary directory number may be associated with a wireline network (Col.10:lines 43-45). Clearly, when the subscriber roams into a wireless network, the subscriber is provided service by utilizing a temporary directory number (Col.11:lines 5-20).

Therefore, one of ordinary skill in the art would have found it obvious to modify Sundar with Malmstrom at the time of the invention such that a primary directory number associated with the wireline network so that a user may be provided with the best service at the lowest possible cost, since wireline networks are cheaper than wireless.

Regarding Claims 2 and 23, Sundar teaches the mobile terminal is registered with the wireless network while the first call is established and the temporary directory number is assigned to the mobile terminal by the wireless switch upon registration (Par.96:lines 30-34, Par.22, and Par.102, the mobile terminal must be registered before being assigned a temporary directory number, unless the mobile terminal has already registered with the wireless network and the switch has cached the temporary directory number).

Regard Claims 4 and 25, Sundar teaches the transition is initiated by sending a message configured to initiate establishing a wireless network connection to the mobile terminal through the wireless network using the temporary directory number associated with the mobile terminal (Par.96:lines 17-20 and Par.22 and Par.102, request for the temporary directory number is the message initiating); connecting the first call to the wireless network connection (Par.96:lines 33-39), and dropping a wireline network connection with the mobile terminal (Par.71:lines 9-11).

Regarding Claim 5, Sundar teaches the wireline network interface is a traditional telephony line interface (Fig.3:112, PSTN).

Regarding Claim 6, Sundar teaches the wireline network interface is a voice over packet interface (Fig.3:120, IP indicates that voice would be transmitted as voice over packet on this interface).

Regarding Claim 7, Sundar teaches the wireless network is of CDMA (Par.13).

Regarding Claims 8, 21, 26, and 40, Sundar teaches the transition is initiated by sending a message intended for a wireline switch and configured to cause the wireline switch to transfer the first call to the mobile terminal through the wireless network using the temporary directory number (Par.96:lines 17-20 and Par.22 and Par.102, request for the temporary directory number by the mobile terminal is the message initiating).

Regarding Claims 12 and 30, Sundar teaches the control system includes signal processing function adapted to provide any necessary conversion of signals between the wireline network interface and the local wireless interface (Par.53, voice coding technology).

Regarding Claims 18-19 and 36-37, Sundar teaches the local wireless interface is adapted to support communications with the mobile terminal using 802.11 wireless local area network telephone technology (Par.9 and Fig.3: LAN).

Regarding Claim 39, Sundar teaches inserting a signal in the voice path for the first call prior to initiating the transition to warn parties to the first call of transfer (Par.96:lines 28-30).

Regarding Claims 13-16 and Claims 31-34, Sundar teaches that a mobile station determines the mobile station moving out of the communication zone by detecting bit error rate, a degradation in quality, an inability to communicate with the mobile terminal, a decrease in signal strength associated with communications with the mobile terminal via the local interface surpassing a defined threshold

(Par.96) however the combination of Sundar and Malmstrom do not expressly teach that the control system performs the detection.

The examiner takes **OFFICIAL NOTICE** that it is very well known in the art that power control (i.e. detection of handover based on signal strength) is capable of being performed at the mobile station or at the network side (i.e. MSC/ control system). Therefore to one of ordinary skill in the art, it would have been obvious to modify Sundar and Malmstrom such that the control system performs the detection to provide a method where the mobile station wastes less resources by allowing the network to perform the detection of when a handover is necessary.

7. Claims 9-10 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al (US 2003/0134650 A1) and Malmstrom (US 5901359) in further view of Schellinger et al (US 5260988).

Regarding Claims 9 and 27, Sundar and Malmstrom teach all the limitations as recited in Claims 1, and 22, and Sundar teaches sending a message intended for a wireline switch (Par.96:lines 18-21), however the combination does not expressly teach causing the wireline switch to establish a three-way call based on the first call to the mobile terminal through the wireless network using the temporary directory number.

Schellinger teaches that it is well known in the art that a transition is initiated by sending a message (Col.8:30, i.e. request) intended for a wireline switch (Col.8:30-31) and configured to cause the wireline switch to establish a three-way call (Col.8:32-34) based on the first call to the mobile terminal through

the wireless network using the temporary directory number (Col.8:29-34, i.e. the TLDN/cellular telephone number). This concept of utilizing a TLDN in a 3-way call to transition between a wired to a wireless network is known as can be seen in Schellinger.

To a skilled artisan, it would have been obvious to modify Sundar, Malmstrom, and Schelling at the time of the invention, such that the wireline switch to establish a three-way call based on the first call to the mobile terminal through the wireless network using the temporary directory number, to provide a method where a call can be handed off as it roams between different networks so that a users on-going communication can continue with the least amount of interruption.

Regarding Claims 10 and 28, Sundar teaches a second message intended for the wireline switch and configured to instruct the wireline switch to drop a wireline network connection (Par.71:lines 9-11).

8. Claims 20 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al (US 2003/0134650 A1) and Malmstrom (US 5901359) in further view of Hamalainen et al (US 2002/0061744 A1).

Regarding Claims 20 and 38, Sundar and Malmstrom teaches all the limitations as recited in claims 1 and 22, however **the combination does not expressly teach** the local wireless interface is adapted to support communications with the mobile terminal using Bluetooth.

Hamalainen teaches that a local wireless interface is adapted to support communication with a mobile terminal using Bluetooth (Par.20).

Therefore, to a skilled artisan it would have been obvious to modify Sundar and Malmstrom with Hamalainen such that the local wireless interface is adapted to support communications with the mobile terminal using Bluetooth, to provide a low cost method of short range wireless voice and data links between devices.

9. Claims 17 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al (US 2003/0134650 A1) and Malmstrom (US 5901359) in further view of Charney et al (US 2004/0132485 A1).

Regarding Claims 17 and 35, Sundar and Malmstrom teaches all the limitations as recited in Claims 1 and 22, however the combination does not expressly teach that the local wireless interface is adapted to support communications with the mobile terminal using cordless telephone technology.

Charney teaches that it is well known in the art that a wireless LAN and access points provide data services by a cordless telephone (Par.28 and Fig.4).

Therefore, to a skilled artisan it would have been obvious to modify Sundar and Malmstrom with Charney, such that that the local wireless interface is adapted to support communications with the mobile terminal using cordless telephone technology, to provide a method where a dual mode phone may operate in a wireline system when possible so that the lowest cost may be incurred for service.

10. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al (US 2003/0134650 A1) and Malmstrom (US 5901359) in further view of Ginter (US 5579375).

Regarding Claims 41 and 42, Sundar and Malmstrom teach all the limitation as recited in Claims 1 and 22, however the combination does not expressly teach a visiting location register is associated with the wireless switch and accesses the temporary directory number from the wireless switch and provides the temporary directory number directly or indirectly via a home location register to a wireline switch in the wireline network.

Ginter teaches that it is well known in the art that a visiting location register is associated with a wireless switch and accesses the temporary directory number from the wireless switch and provides the temporary directory number directly or indirectly via a home location register to an initiating wireless switch in another wireless network (Col.8:lines 45-65). To a skilled artisan, this concept of obtaining temporary directory numbers is well known in the art and is applicable to different systems (i.e. wireless/wireline).

Therefore, to a skilled artisan it would have been obvious to modify Sundar and Malmstrom with Ginter such that a visiting location register is associated with the wireless switch and accesses the temporary directory number from the wireless switch and provides the temporary directory number directly or indirectly via a home location register to a wireline switch in the wireline network, to provide

a method where a user may be allowed to roam while making calls without having the call be disrupted.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WESLEY L. KIM whose telephone number is (571)272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Wesley L Kim/
Examiner, Art Unit 2617

Notice of References Cited	Application/Control No. 10/593,539	Applicant(s)/Patent Under Reexamination SYLVAIN, DANY	
	Examiner WESLEY L. KIM	Art Unit 2617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0134650 A1	07-2003	Sundar et al.	455/465
*	B	US-2002/0061744 A1	05-2002	Hamalainen et al.	455/426
*	C	US-5,901,359 A	05-1999	Malmstrom, Douglas Allen	455/461
*	D	US-5,579,375 A	11-1996	Ginter, Thomas	455/417
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	10893539
Filing Date	2003-10-24
First Named Inventor	Dany Sylvain
Art Unit	2817
Examiner Name	Wesley Leo Kim
Attorney Docket Number	7000-271A

U.S. PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code†	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5890054		1999-03-30	Logsdon et al.	
	2	5940756		1999-08-17	Sibecas et al.	
	3	6052597		2000-04-18	Ekstrom	
	4	6104799		2000-08-15	Jain et al.	
	5	6633636	B1	2003-10-14	McConnell et al.	
	6	6791988	B1	2004-09-14	Hameleers et al.	
	7	6940844	B2	2005-09-06	Purkayastha et al.	
	8	6985720	B2	2006-01-10	Qu et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		10693539
Filing Date		2003-10-24
First Named Inventor	Dany SylvaIn	
Art Unit	2617	
Examiner Name	Wesley Leo Kim	
Attorney Docket Number	7000-271A	

	9	7043248	B2	2006-05-09	Hallenstal et al.	
	10	6243581	B1	2001-06-05	Jawanda	
	11	6327470	B1	2001-12-04	Ostling	
	12	6373828	B1	2002-04-16	Stewart et al.	
	13	6766170	B1	2004-07-20	Aretz et al.	
	14	7058415	B2	2006-06-06	Bushnell et al.	
	15	5737703		1998-04-07	Byrne	

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS

Remove

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20020024947	A1	2002-02-28	Luzzatti et al.	
	2	20030224795	A1	2003-12-04	Wilhoite et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		10693539
Filing Date		2003-10-24
First Named Inventor	Dany Sylvain	
Art Unit	2617	
Examiner Name	Wesley Leo Kim	
Attorney Docket Number	7000-271A	

3	20040160932	A1	2004-08-19	Yegoshin	
4	20040202940	A1	2004-10-14	Kramer et al.	
5	20040203606	A1	2004-10-14	Souissi et al.	
6	20050148353	A1	2005-07-07	Hicks, III et al.	
7	20050159153	A1	2005-07-21	Mousseau et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

[Add](#)

FOREIGN PATENT DOCUMENTS

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	02/19750	WO	A1	2002-03-07	Hallensal		<input checked="" type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button.

[Add](#)

NON-PATENT LITERATURE DOCUMENTS

[Remove](#)

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	International Search Report for PCT/IB2004/001668 mailed July 5, 2005.	<input checked="" type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10893539
Filing Date	2003-10-24
First Named Inventor	Dany Sylvain
Art Unit	2817
Examiner Name	Wesley Leo Kim
Attorney Docket Number	7000-271A

2	ADACHI et al., "A Handoff Examination of a Hybrid System Using Cellular and Ad-Hoc Modes," IEICE Transactions on Communications, Institute of Electronics Information and Communications Engineering, Tokyo, Japan, November, 2000, vol. E83-B, no. 11, pages 2494-2500, XP001085366.	<input checked="" type="checkbox"/>
If you wish to add additional non-patent literature document citation information please click the Add button <input type="button" value="Add"/>		
EXAMINER SIGNATURE		
Examiner Signature	/Wesley Kim/	Date Considered 12/02/2008
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		
<p>¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 If possible. ⁵ Applicant is to place a check mark here if English language translation is attached.</p>		